Information for New Principal Investigators (PIs)

Congratulations on your appointment within the College of Food, Agricultural and Environmental Sciences! CFAES is a large, diverse land-grant college comprised of three campuses—Columbus, Wooster, and Statewide.

CFAES research is often complex and interdisciplinary. Our faculty, staff, and students collaborate with governmental organizations, industry partners and other colleges and universities to advance modern knowledge. We strive to develop new technologies; ensure human, animal, and environmental health; and prepare future leaders and scientists.

We sustain life.

Getting Started

- Confirm Principal Investigator (PI) status in the PI Portal
- Complete CITI Responsible Conduct of Research and additional training as needed
- Complete the required, annual Conflict of Interest Disclosure (COI)
- Complete Institutional Data Policy Training (BuckeyeLearn)
- Familiarize yourself with OSU research policies at orc.osu.edu/resources
- Learn about BuckeyeBox (box.osu.edu)
- Check out the current issue of Research News, the CFAES research newsletter
- Review resources and upcoming events on the GDSU website
- Consider submitting an application to the SEEDS program
- Contact GDSU to discuss proposal development

One College
Teaching | Research | Outreach

The Grant Development Support Unit (GDSU) is a free service provided to all CFAES employees. The staff offers guidance to researchers in planning and conceptualizing externally funded research projects, finding funding opportunities, and submitting well-crafted and competitive applications. The GDSU has been successful in obtaining more than $101 million in new funding since its inception in 2010.

CFAES provides research and related educational programs to clientele on a nondiscriminatory basis. For more information, visit cfaesdiversity.osu.edu. For an accessible format of this publication, visit cfaes.osu.edu/accessibility.
<table>
<thead>
<tr>
<th>Topic</th>
<th>Department</th>
<th>Name</th>
<th>Phone</th>
<th>Email</th>
</tr>
</thead>
<tbody>
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RESEARCH INTEGRITY

Responsible Conduct of Research (RCR) is just one of the ways that the College of Food, Agricultural and Environmental Sciences demonstrates its commitment to excellence in research. Training in RCR promotes public trust, research integrity, and the preparation of future researchers. RCR covers a variety of topics including conflicts of interest, animal welfare, human subject protection, data acquisition & management, mentoring & collaboration, responsible authorship and publication, peer review, research misconduct and the scientist as a responsible member of society.

The Office of Research (OR) requires that all eligible personnel (faculty, staff, and students) complete the Responsible Conduct of Research (RCR) online course through the CITI website. If you are listed on an IACUC or IRB protocol, you will be required to complete this RCR training in addition to the appropriate CITI module.

Detailed instructions on how to login to the CITI website can be found here. If you have questions, please contact the Office of Research at RCRInfo@osu.edu.

The mission of the Office of Research Compliance (ORC) is to support and promote ethical research practices at The Ohio State University. ORC serves the OSU research community by coordinating institution-wide research compliance policy and procedure development, and by partnering with researchers, so that the University is compliant with federal, state, and local laws and regulations as well as University policies.

The Office of Responsible Research Practices assists faculty, staff and students in maintaining high research standards by providing education on OSU and federal research policies, assisting with research submissions and aiding OSU review boards in keeping consistent processes.

Animal Care and Use — The Institutional Animal Care and Use Committee (IACUC) reviews and oversees the responsible use of animals in university research and instructional activities.

orrp.osu.edu/iacuc

Biosafety — The Institutional Biosafety Committee (IBC) reviews and oversees research involving biohazards and recombinant or synthetic nucleic acid molecules.

orrp.osu.edu/ibc

Human Subjects — The Institutional Review Boards (IRB) review and oversee research involving human subjects.

orrp.osu.edu/irb

CONFLICT OF INTEREST

The Ohio State University requires certain faculty, staff members, and students to complete an annual financial disclosure to comply with federal conflict of interest (COI) regulations, accreditation requirements, and OSU faculty and staff COI policies.

A conflict of interest exists if financial interests or other opportunities for tangible personal benefit may exert a substantial and improper influence on an employee’s professional judgment in exercising any university duty or responsibility including designing, conducting, or reporting research. A conflict of interest is not an accusation and does not imply that an employee’s judgment has been compromised; this process encourages transparency.
RESEARCH RESOURCES

GRANT DEVELOPMENT SUPPORT UNIT
The Grant Development Support Unit (GDSU) aids CFAES employees with grant proposal development and submission. Services are free of charge and are on a first-come first-served basis. We serve as the first point of contact for research questions and also arrange the GDSU Seminar Series, a monthly series of educational sessions on research topics.
research.cfaes.ohio-state.edu

OFFICE OF SPONSORED PROGRAMS
The Office of Sponsored Programs partners with faculty and staff to provide the highest quality research administration at all stages of sponsored projects, by promoting electronic research administration, responsible stewardship of funds, and sound management practices.
osp.osu.edu

OFFICE OF POSTDOCTORAL AFFAIRS
The Office of Postdoctoral Affairs works to implement programs and events to enrich the postdoctoral experience at the university. The office prepares postdocs for successful research careers in academia, industry, government and other employment sectors.
u.osu.edu/osupac

INDUSTRY LIAISON OFFICE
The vision and mission of the Industry Liaison Office (ILO) is to cultivate and foster mutually beneficial relationships with partner organizations worldwide by aligning their aspirations and needs with OSU students, research, innovations, and assets.
ilo.osu.edu

TECHNOLOGY COMMERCIALIZATION OFFICE
The Technology Commercialization Office (TCO) assists faculty, post-doctoral, and student researchers turn their ideas, inventions, and technologies into business opportunities and products that make an impact in the local and global marketplace.
ceo.osu.edu

OFFICE OF ADVANCEMENT
CFAES is committed to improving our world through research and education. The Office of Advancement manages fundraising and donations to the college that make our research possible. The college also offers scholarships to help fund CFAES students.
advancement.osu.edu

RESEARCH COMMONS
If you need assistance with writing, creating data management plans, or finding funding opportunities, try the Research Commons on the Columbus campus. Their staff offer consultations, workshops, and many trainings on various research-related topics throughout the year.
library.osu.edu/researchcommons

DC DAYS
The CFAES Research Office and the GDSU arrange an annual trip to Washington, D.C. to provide emerging CFAES researchers the opportunity to visit federal funding agencies. This experience allows attendees to visit with federal agency program officers, determine whether the researcher's basic concept is a good fit for the goals and objectives of the sponsor's program, seek advice concerning project design and appropriate funding track, and be more competitive in the peer review process. Approximately 8-10 Assistant Professors are chosen through a competitive application process. In order to apply, you must be an active grant seeker and have an OARDC or CFAES appointment. Priority will be given to non-tenured assistant professors.
go.osu.edu/DCDays

research.cfaes.ohio-state.edu
gdsu@osu.edu
GRAND CHALLENGES
CFAES has identified four Grand Challenges as priority areas to focus and leverage the College’s resources. By nature, these challenges are complex and interdisciplinary, requiring many minds and innovative ideas to discover solutions.

ONE HEALTH
Integration of human health, animal health, and environmental health

RURAL—URBAN INTERFACE
Focus on policy, economic issues, and consumer communications and education

SUSTAINABILITY
Preserve the environment and water quality, and cultivate food production and security

PREPARING FUTURE SCIENTISTS AND LEADERS
Prepare the future workforce for critical jobs in the agricultural sector

TOXIC EXPOSURE AND EFFECTS IN BEES
Reed Johnson, Department of Entomology
Honey bees are valuable contributors to U.S. agriculture through pollination of crops, but have experienced an unsettling disappearance in recent years. This is partially due to pesticide use, which can cause “Colony Collapse Disorder” and other negative effects. Researchers explored relation of effects among insecticides, fungicides, and a spray adjuvant applied to almonds during bloom to simulate field spray exposure to adult worker bees and immature honey bees. Results indicated that a combination of the insecticide (chlorantraniliprole) and fungicide (propiconazole) has the potential to kill bees in the field despite being the relatively safest of these products when applied alone. This effect is increased when a spray adjuvant was added. The insecticide diflubenzuron by itself also demonstrated the potential to kill both juvenile and queen honey bees. This information has been shared with almond growers in California, resulting in recommendation by the Almond Board of California to avoid insecticide applications to almonds while in bloom.

RIVER BIODIVERSITY AND FOOD-WEBS IN CHANGING FORESTED LANDSCAPES
Mazeika Sullivan, School of Environment and Natural Resources
River ecosystems are important collections of biodiversity and form the principal source of renewable water supply for humans and freshwater ecosystems. Rivers are under unprecedented stress due to changes like urbanization and conversion to agricultural land cover. A valuable measure of biodiversity is food-chain length which influences other aspects like species diversity and ecosystem function. A study was conducted to investigate the effects of land use, land cover, climate, catchment physiographic characteristics, aquatic nutrients, streamflow regimes, and water temperature on river food-webs in multiple regions. Results showed that aquatic insects in estuaries appear to be nutritionally valuable to riparian consumers, despite limited numbers and diversity, and that an invasive pest, the Hemlock Woolly Adelgid, can affect stream invertebrate communities, which may have left latent effects on animals higher up the food chain. Another finding suggests that human changes can be important determinants for food-web structure in regulated rivers. For example, artificial lighting at night (like lighting from buildings and streetlamps) can alter the flows of energy between aquatic and terrestrial systems, causing an environmental disruption that can cross ecosystem boundaries. Results of ongoing research will continue to be disseminated to the appropriate audiences to inform management decisions.
GRANT DEVELOPMENT SUPPORT UNIT

The Grant Development Support Unit (GDSU) is a part of the CFAES Office for Research and Graduate Education. Our mission is to serve CFAES employees as they conceptualize, develop, write, and submit their proposals to federal agencies and other entities to seek funding. We work across all disciplines with the goal of making the proposal development process as straightforward and streamlined as possible.

We offer an extensive array of proposal development services, which include:

- Identifying appropriate funding opportunities
- Announcing grant opportunities and coordinating internal competitions
- Managing and coordinating the preparation of the proposal
- Drafting non-technical sections of the proposal
- Providing proposal review and editorial services
- Connecting faculty to appropriate staff and other resources throughout the university
- Offering proposal development and research related training
- Color-coded proposal review

The GDSU is a free service provided to all CFAES employees. We are available to answer grant related questions and assist you with proposal development and submission. We have offices on both the Wooster and Columbus campuses. Contact us today!

THE GRANT LIFECYCLE

<table>
<thead>
<tr>
<th>Principal Investigator</th>
<th>Grant Development Support Unit</th>
<th>Office of Sponsored Programs</th>
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</thead>
<tbody>
<tr>
<td>Identify Funding Source</td>
<td>Assist with finding funding and understanding the RFP</td>
<td>Assist with finding funding and understanding the RFP</td>
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<tr>
<td>Prepare technical Proposal</td>
<td>Assist with proposal development</td>
<td>SPIN database</td>
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<tr>
<td>Prepare and Submit Budget</td>
<td>Provide guidance on sponsor requirements</td>
<td>Provide guidance on sponsor requirements</td>
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<tr>
<td>Submit appropriate protocols</td>
<td>Review budget justification draft</td>
<td>Approve final budget</td>
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<td>Address sponsor inquiries after submission</td>
<td>Format and upload documents for submission</td>
<td>Verify research compliance protocols</td>
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<tr>
<td>Notify OSP if award is offered</td>
<td>Submit final proposal to OSP</td>
<td>Submit final proposal to sponsor</td>
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<tr>
<td>Responsible for financial and programmatic stewardship of award</td>
<td>Help with rebudgeting to sponsor</td>
<td>Address sponsor inquiries after submission</td>
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<td>Negotiate award terms</td>
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<td>Help with rebudgeting to sponsor</td>
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<td>No assigned role</td>
<td>Submit invoices to sponsor</td>
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FINDING FUNDING

GRANT DEVELOPMENT SUPPORT UNIT
One of the services that the GDSU offers is assistance finding funding. If you have an idea for a project, but are unsure of a possible funding source, or if you don't know where to start, contact us and we can assist you. There are also resources available on our website. grants.cfaes.ohio-state.edu/funding

SPIN FUNDING DATABASE
The SPIN database is available to all Ohio State faculty, staff and students. It allows you to create an account where you can save searchers for future reference. There are over 40,000 funding opportunities listed in the database and you can create customized searches and save them for later. See go.osu.edu/funding for step-by-step instructions.

INTERNAL FUNDING
There are various internal funding opportunities at Ohio State. Many of the multidisciplinary centers offer funding, such as the Center for Applied Plant Sciences (CAPS). CFAES also offers the SEEDS program, which you can read more about online at grants.cfaes.ohio-state.edu/seeds. You can find a listing of some of the centers on the Office of Research website: research.osu.edu/about/centers-and-institutes/

FEDERAL FUNDING
Grants.gov has educational resources and allows you to search through grants from 26 different federal agencies, such as the United States Department of Agriculture-National Institute of Food and Agriculture (USDA-NIFA), National Institutes of Health (NIH), and the National Science Foundation (NSF).

STATE OF OHIO FUNDING
The State of Ohio offers many opportunities and resources for funding. Their website lists current RFP's administered by the Ohio Department of Education.
ohiohighered.org/grants

LIMITED SUBMISSION OPPORTUNITIES
A limited submission opportunity is one where the sponsor restricts the number of proposals that an institution can submit. The Office of Research keeps a database of Limited Submission Opportunities and internally coordinates the application process to ensure that only the allowable number of proposals are submitted on behalf of the university.